

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Kerry Zang et al.
Serial No.: 10/777,514
Filing Date: February 11, 2004
Confirmation No.: 5263
Group Art Unit: 3738
Examiner: Miller, Cheryl L.
Title: **CONICAL, THREADED SUBTALAR IMPLANT**

MAIL STOP RCE

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

DECLARATION PURSUANT TO 37 C.F.R. § 1.131

I, the undersigned, hereby declare and state that:

1. I am over the age of 21 years, of sound mind, and competent in all respects to make this Declaration.

2. I am a coinventor of the subject matter of the above-referenced patent application, entitled *Conical, Threaded Subtalar Implant*, filed on February 11, 2004 (the "Application").

3. Prior to February 10, 2004, I gained a full understanding of the subject matter of at least the current version of Claims 1 and 17 of the Application (the "Invention"), as provided to me in a draft amendment by Baker Botts, L.L.P., the draft amendment attached hereto as Appendix A; therefore, I conceived the subject matter of the Invention prior to February 10, 2004.

4. Beginning after conception of the Invention, I participated in the design and manufacture of an apparatus that incorporated the subject matter of the Invention (the "Apparatus") and that was complete prior to February 10, 2004; therefore, I reduced the subject matter of the Invention to practice prior to February 10, 2004.

5. All of the work in conceiving and reducing the Invention to practice occurred in the United States.

6. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. Further, I declare that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the Application or any patent issuing thereon.

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PATENT APPLICATION
USNM 10/777,514

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Declaration pursuant to 37 C.F.R. § 1.131 in regard to 10/777,514.

Signed this 5th day of October, 2006.


Shaher A. Ahmad

EXHIBIT A
DRAFT AMENDMENT OF THE CLAIMS

1. (Currently Amended) A medical implant, comprising:

a body including a conical portion having a length, the body adapted for implantation into a person's body and sized to fit within a sinus tarsi of a subtalar joint in the person's body for at least partially preventing displacement of the talus associated with the subtalar joint; and

a plurality of uninterrupted threads formed around an exterior surface of the conical portion of the body and extending along at least a portion of the length of the conical portion, the plurality of threads adapted to help secure the implant in place within the ~~person's body~~ sinus tarsi, each of the plurality of threads including a crest having a substantially flat surface; and

~~wherein the conical portion of the body has a degree of taper; and~~

~~wherein the plurality of crests define a cone having the same degree of taper as the conical portion of the body.~~

the threads being tapered with respect to a longitudinal axis of the body.

2. (Cancelled)

3. (Currently Amended) The medical implant of ~~Claim 2~~ Claim 1, wherein the conical portion of the body has a taper of approximately 18 degrees.

4. (Currently Amended) The medical implant of ~~Claim 2~~ Claim 1, wherein the conical portion of the body has a taper measuring between 10 degrees and 30 degrees.

5. (Original) The medical implant of Claim 4, further comprising an engagement formed in a trailing end of the body and adapted to receive a tool for rotating the implant about a longitudinal axis of the implant for implantation of the implant into the sinus tarsi.

6. (Previously Presented) The medical implant of Claim 5, wherein each thread comprises a thread height and each crest comprises a crest width, wherein the ratio of the crest width to the thread height is at least 0.3.

7. (Previously Presented) The medical implant of Claim 5, wherein each crest comprises a crest width, the plurality of threads comprises a pitch, and the ratio of the crest width to the pitch of the one or more threads is at least 0.15.

8. (Previously Presented) The medical implant of Claim 5, further comprising a thread root between each adjacent pair of the plurality of threads, each thread root having a width between 0.020 and 0.040 inches.

9. (Withdrawn)

10. (Withdrawn)

11. (Withdrawn)

12. (Previously Presented) The medical implant of Claim 5, wherein:
each of one or more threads has a thread angle of approximately 60 degrees and comprises a thread height and a crest width, wherein the ratio of the crest width to the thread height is at least 0.3; and

the implant further comprises a thread root between each adjacent pair of threads, each thread root having a root width between 0.020 and 0.040 inches.

13. (Original) The medical implant of Claim 12, wherein:
the conical portion of the body has a taper of approximately 18 degrees;
the thread height of each of the one or more threads is approximately 0.032 inches;
the root width between each adjacent pair of threads is approximately 0.030 inches;
and
the pitch of the one or more threads is approximately 0.090 inches.

14. (Original) The medical implant of Claim 12, wherein:

the conical portion of the body has a taper of 18 degrees;
the thread height of each of the one or more threads is 0.032 inches;
the root width between each adjacent pair of threads is 0.030 inches; and
the pitch of the one or more threads is 0.090 inches.

15. (Original) The medical implant of Claim 12, wherein:
the conical portion of the body has a taper of approximately 18 degrees;
the thread height of each of the one or more threads is approximately 0.041 inches;
the root width between each adjacent pair of threads is approximately 0.030 inches;
and
the pitch of the one or more threads is approximately 0.100 inches.

16. (Original) The medical implant of Claim 12, wherein:
the conical portion of the body has a taper of 18 degrees;
the thread height of each of the one or more threads is 0.041 inches;
the root width between each adjacent pair of threads is 0.030 inches; and
the pitch of the one or more threads is 0.100 inches.

17. **(Currently Amended)** A method of forming a medical implant, comprising:
providing a body including a conical portion having a length, the body adapted for implantation into a person's body and sized to fit within a sinus tarsi of a subtalar joint in the person's body for at least partially preventing displacement of the talus associated with the subtalar joint; and

forming a plurality of uninterrupted threads around an exterior surface of the conical portion of the body and extending along at least a portion of the length of the conical portion, the plurality of threads adapted to help secure the implant in place within the ~~person's body~~ sinus tarsi, each of the plurality of threads including a crest having a substantially flat surface, ~~wherein the conical portion has a degree of taper, and wherein the plurality of crests define a cone having the same degree of taper as the conical portion of the body~~ the threads being tapered with respect to a longitudinal axis of the body.

18. **(Cancelled)**

19. **(Original)** The method of ~~Claim 18~~ Claim 17, wherein the conical portion of the body has a taper of approximately 18 degrees.

20. **(Original)** The method of ~~Claim 18~~ Claim 17, wherein the conical portion of the body has a taper measuring between 10 degrees and 30 degrees.

21. **(Original)** The method of Claim 20, further comprising forming an engagement in a trailing end of the body, the engagement being adapted to receive a tool for rotating the implant about a longitudinal axis of the implant for implantation of the implant into the sinus tarsi.

22. **(Previously Presented)** The method of Claim 21, wherein forming the plurality of threads comprises forming one or more threads each comprising a thread height and a crest width, wherein the ratio of the crest width to the thread height is at least 0.3.

23. **(Previously Presented)** The method of Claim 21, wherein forming the plurality of threads comprises forming one or more threads, each comprising a crest width, the one or

more threads comprise a pitch, and the ratio of the crest width to the pitch of the one or more threads is at least 0.15.

24. (Withdrawn)

25. (Withdrawn)

26. (Withdrawn)

27. (Previously Presented) The method of Claim 21, wherein:

forming the plurality of threads comprises forming one or more threads each having a thread angle of approximately 60 degrees and comprising a thread height and a crest width, wherein the ratio of the crest width to the thread height is at least 0.3; and

the implant further comprises a thread root between each adjacent pair of threads, each thread root having a root width between 0.020 and 0.040 inches.

28. (Original) The method of Claim 27, wherein:

the conical portion of the body has a taper of approximately 18 degrees;

the thread height of each of the one or more threads is approximately 0.032 inches;

the root width between each adjacent pair of threads is approximately 0.030 inches;

and

the pitch of the one or more threads is approximately 0.090 inches.

29. (Original) The method of Claim 27, wherein:

the conical portion of the body has a taper of 18 degrees;

the thread height of each of the one or more threads is 0.032 inches;

the root width between each adjacent pair of threads is 0.030 inches; and

the pitch of the one or more threads is 0.090 inches.

30. (Previously Presented) The method of Claim 27, wherein:
the conical portion of the body has a taper of approximately 18 degrees;
the thread height of each of the one or more threads is approximately 0.041 inches;
the root width between each adjacent pair of threads is approximately 0.030 inches;
and
the pitch of the one or more threads is approximately 0.100 inches.

31. (Previously Presented) The method of Claim 27, wherein:
the conical portion of the body has a taper of 18 degrees;
the thread height of each of the one or more threads is 0.041 inches;
the root width between each adjacent pair of threads is 0.030 inches; and
the pitch of the one or more threads is 0.100 inches.

32. (Previously Presented) The medical implant of Claim 6, wherein the thread height of each thread is the same.

33. (Previously Presented) The method of Claim 21, wherein forming the plurality of threads comprises forming a plurality of threads having the same thread height.

34. (Withdrawn)

35. (Withdrawn)

36. (New) The medical implant of Claim 1, wherein the flat surfaces of each of the crests form equal angles with respect to the longitudinal axis.

37. (New) The medical implant of Claim 36, wherein the conical body portion has a degree of taper, the angles formed by the flat surfaces of each of the crests are equal to the degree of taper.

38. (New) The method of Claim 17, wherein the flat surfaces of each of the crests form equal angles with respect to the longitudinal axis.

39. (New) The method of Claim 38, wherein the conical body portion has a degree of taper, the angles formed by the flat surfaces of each of the crests are equal to the degree of taper.